

Art Unit: 2675

CLMPTO

March 29, 2002

LST 10/19/04

1. A method of presenting information to a user in respect of a query, the method comprising the steps of:

- (i) decoding the query into one or more semantically meaningful query elements;
  - (ii) accessing annotation elements stored in a first data store;
  - (iii) comparing a semantically meaningful query element from step (i) with the annotation elements so as to identify at least one annotation element that matches the semantically meaningful query element;
  - (iv) retrieving a plurality of data entries corresponding to the identified annotation element(s), each of the plurality being stored in a second data store; and
  - (v) presenting the plurality of retrieved data entries to the user;
- characterised by

presenting the retrieved data entries in accordance with discourse criteria and preferences of the user.

2. A method according to claim 1, wherein the preferences of the user are stored as templates, each of which gives a default ordering for presentation of the data entries.

3. (Amended) A method according to claim 1 [or claim 2], including the step of monitoring and storing the queries entered by the user.

4. A method according to claim 3 wherein the preferences of the user are identified from the said stored queries entered by the user.

5. (Amended) A method according to [any one of the preceding claims] claim 1,  
in which the annotation elements are arranged in accordance with semantic  
relationships between annotation elements, or lexical relationships between annotation  
elements.

6. (Amended) A method according to [any one of the preceding claims] claim 1,  
in which said comparison step (iii) includes the steps of:

inputting a semantically meaningful query element into a predetermined rule;

inputting an annotation into the predetermined rule; and

processing the rule.

7. (Amended) A method according to [any one of the preceding claims] claim 1,  
further comprising the steps of:

analysing the query so as to extract:

a subject of the query;

a property of the query;

retrieving one or more predetermined sets of queries and responses from a further data store, each of which set has at least one property and at least one subject identifier;

comparing the subject and property information extracted at step (a) with the property or properties and subject identifier(s) retrieved at step (b) so as to identify a predetermined set of queries and responses relating to the query; and

automatically submitting the queries comprising the predetermined set for processing according to decoding step (i).

8. Apparatus for processing queries, which queries may be expressed in natural language, the apparatus comprising:

decoding means for decoding a query into one or more semantically meaningful query elements;

accessing means for accessing data storage, which data storage includes at least one annotation element and one or more corresponding data entries;

identifying means for identifying annotation elements in accordance with the semantically meaningful query elements;

retrieval means for retrieving at least one data entry corresponding to each identified annotation element;

characterised by

a store arranged to store discourse criteria and preferences of the user identifying presentation of data entries;

and in that the retrieval means is arranged to identify discourse criteria and preferences corresponding to the retrieved data entries and to present the retrieved data entries in accordance therewith.

9. Apparatus according to claim 8, wherein the preferences of the user are stored in the store as templates, each of which gives a default ordering for presentation of the data entries.

10. Apparatus according to Claim 9, further comprising user means for loading and modifying data entries in the data storage.

11. (Amended) Apparatus according to [any one of claims 8 to 10] claim 8, wherein the annotation elements are arranged in accordance with semantic relationships between annotation elements, or lexical relationships between annotation elements.

12. (Amended) Apparatus according to [any one of claims 8 to 11] claim 8, in which said decoding means includes a linguistic store comprising lexical, syntactic and discourse information and being accessible by the decoding means for deriving semantically meaningful elements corresponding to the query.

13. (Amended) Apparatus according to [any one of claims 8 to 12] claim 8, including means responsive to queries entered in a plurality of languages.

14. (Amended) Apparatus according to [any one of claims 8 to 13] claim 8, including linking means for linking at least one annotation to at least one data entry in the data store.

15. (Amended) Apparatus according to [any one of claims 8 to 14] claim 8, wherein the data entries include all or any of text, hyperlinks, graphical data, pagelets, computer programs and/or video data.

16. (Amended) Apparatus according to [any one of claims 8 to 15] claim 8, wherein the queries are received from a user via input means.

17. Apparatus according to claim 16, wherein the input means includes both or either of text input and/or speech input means.

18. (Amended) Apparatus according to [any one of claims 8 to 17] claim 8,  
further comprising:

a further data store comprising a plurality of predetermined sets of queries, each  
of which has data identifying a property and a subject identifier relating thereto;

analysing means arranged to analyse the query so as to extract a subject of the  
query and a property of the query;

means arranged to compare the subject and property information extracted by  
the analysing means with the property or properties and subject data stored in the  
further data store so as to identify a predetermined set of queries relating to the said  
query; and

means arranged to automatically submit the queries comprising the identified set  
for processing by the decoding means.

20. (Amended) [20.] 19. A computer program, or a suite of computer  
programs, comprising a set of instructions to cause a computer, or a suite of computers,  
to perform the method according to [claims 1 to 7] claim 1.